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10/010,972	12/04/2001	Mitchell W. Mutz	7610-0047	6490

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EXAMINER	
FEGGINS, KRISTAL J	
ART UNIT	**PAPER NUMBER**
2861	

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/010,972	MUTZ ET AL.	
	Examiner	Art Unit	
	K. Feggins	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-83 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-83 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Allowable Subject Matter

1. Prosecution on the merits of this application is reopened on claims 1- 83 are considered unpatentable for the reasons indicated below:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-11, 18-49, 55-83 are rejected under 35 U.S.C. 102(e) as being anticipated by Williams et al. (US 6,596,239 B2).

Williams et al. disclose the following claimed limitations:

* regarding claim 1, a device for acoustically assessing the contents of a plurality of fluid reservoirs (Abstract, figs 1-3),

* a plurality of reservoirs each comprising a solid surface, wherein a portion of each reservoir is adapted to contain a fluid (col 4, lines 19-53, col 12, lines 35-45, figs 1-2);

* an acoustic radiation generator for generating acoustic radiation (col 4, lines 19-53, col 12, lines 35-45, figs 1-2);

* a means for positioning the acoustic radiation generator in acoustic coupling relationship to each reservoir such that acoustic radiation generated by the acoustic radiation generator is transmitted through the solid surface and the portion of each reservoir adapted to contain a fluid (col 4, lns 20-53, 59-65, col 12, lns 20-65, figs 1-2);

* an analyzer for analyzing a characteristic of the transmitted acoustic radiation, wherein the analyzer is positioned to receive the transmitted acoustic radiation (col 4, lines 44-53, col 17, lines 58-col 18, line 12, col 17, line 58-col 18, line 7, figs 1, 2, 6).

* regarding claim 2, comprised of a single acoustic radiation generator/60/ (col 4, lines 22-25, figs 1-3).

* regarding claim 3, wherein the reservoirs are removable from the device (col

* regarding claim 4, wherein the reservoirs represent individual wells in a well plate.(col 7, lines 9-22)

* regarding claim 5, wherein the reservoirs are substantially acoustically indistinguishable (col 4, lines 19-53, col 7, line 43-col 8, line 5, figs 1-3)

* regarding claim 6, wherein the reservoirs are optically opaque/solid.

* regarding claim 7, wherein the reservoirs are sealed/fluid containment structure, having containment zones (col 6, lines 45-60).

* regarding claim 8, wherein the device comprises 96 reservoirs/well plates/ (col 7, lines 9-22).

* regarding claim 9, wherein the device comprises 384 reservoirs/well plates/ (col 7, lines 9-22).

* regarding claim 10, wherein the device comprises 1536 reservoirs/well plates/ (col 7, lines 9-22).

* regarding claim 11 wherein the device comprises 3456 reservoirs/3950 reservoirs/.

* regarding claim 18. The device of claim 1, wherein at least one reservoir contains a fluid (col 4, lines 23-44, col 9, lines 43-49).

* regarding claim 19, wherein the at least one of the reservoirs contains an aqueous fluid (col 6, lines 45-55).

* regarding claim 20 wherein the at least one of the reservoirs contains a

nonaqueous fluid (col 5, lines 49-59, col 7, lines 1-8)

* regarding claim 21 wherein the nonaqueous fluid comprises an organic solvent/any type of fluid is sutiable/ (col 5, lines 49-59).

* regarding claim 22, wherein the fluid contains a biomolecule/any type of fluid is sutiable/ (col 5, lines 49-59, col 13, lines 3-43).

* regarding claim 23, wherein the fluid is at least partially frozen/any type of fluid is sutiable/ (col 5, lines 49-59).

* regarding claim 24, wherein at least one reservoir contains a substance capable of existing as a fluid at a temperature of about 0°C to about 100°C/any type of fluid is sutiable/ (col 5, lines 49-59).

* regarding claim 25., further comprising a means for altering the relative position of the analyzer with respect to the reservoirs (col 4, lines 36-54, col 12, lines 26-53, col 17, lines 58-col 18, line 8).

* regarding claim 26, wherein the analyzer is positioned in fixed alignment with respect to the acoustic radiation generator (col 4, lines 36-54, col 12, lines 26-53, col 17, lines 58-col 18, line 8, fgis 1-3, 6).

* regarding claim 27, wherein the analyzer is positioned to receive acoustic radiation reflected from a free surface of a fluid contained in a reservoir (col 4, lines 36-54, col 12, lines 26-53, col 17, lines 58-col 18, line 8, figs 1-3, 6).

* regarding claim 28, wherein the acoustic radiation generator comprises a component common to the analyzer (col 4, lines 36-54, col 12, lines 26-53, col 17, lines 58-col 18, line 8, figs 1-3, 6).

* regarding claim 29, wherein the component common to the acoustic radiation generator and the analyzer is a piezoelectric element/65/ (col 2, lines 52-67, col 3, lines 1-2, col 4, lines 5-15, col 8, lines 17-31, col 12, lines 26-53, col 17, lines 58-col 18, line 8, figs 1-3, 6).

* regarding claim 30, wherein the analyzer is adapted to analyze a characteristic of acoustic radiation to determine the volume of fluid in each reservoir (col 5, lines 27-37, col 9, lines 13-27, fig 6)

* regarding claim 31, wherein the analyzer is adapted to analyze a characteristic of acoustic radiation to determine a property of the fluid in each reservoir (col 9, lines 27-51, fig 6).

* regarding claim 32, wherein the property is viscosity (col 5, lines 27-37, col 9, lines 13-51, fig 6).

* regarding claim 33, wherein the property is surface tension (col 5, lines 27-37, col 9, lines 13-51, fig 6).

* regarding claim 34, wherein the property is acoustic impedance (col 11, line 62-col 12, line 12)

* regarding claim 35, wherein the property is acoustic attenuation/increase or decrease in wavelength or adjustable wavelength (col 3, lines 3-30, col 4, lines 19-53, col 5,lines 27-38, col 7, lines 55-61, col 10, lines 49-65).

* regarding claim 36, wherein the property is solid content (col 15, lines 39-col 17, line 9).

* regarding claim 37, wherein the property is impurity content (col 15, lines 39-col 17, line 9).

* regarding claim 38, wherein the characteristic is the intensity of the acoustic radiation (col 3, lines 3-30, col 4, lines 19-53, col 5, lines 27-38, col 7, lines 55-61, col 8, lines16-31, col 17, line 58-col 18, line 7, fig 6).

* regarding claim 39, wherein the characteristic is the wavelength of the acoustic radiation (col 3, lines 3-30, col 4, lines 19-53, col 5,lines 27-38, col 7, lines 55-61, col 10, lines 49-65).

* regarding claim 40, wherein the acoustic generator represents a component of an acoustic ejector for ejecting droplets from the reservoirs (col 3, lines 3-30, col 4, lines 19-53, col 5, lines27-38, col 7, lines 55-61, col 8, lines16-31, col 17, line 58-col 18, line 7, fig 6).

* regarding claim 41, further comprising a focusing means for focusing the acoustic radiation generated by the acoustic generator (col 4, lines19-53, col 11, lines 29-52, figs 1-2).

* regarding claim 42, wherein the focusing means is adapted to focus the acoustic radiation according to the results of acoustic analysis performed by the analyzer (col 4, lines19-53, col 11, lines 29-52, col 17, line 57-col 18, line 8, fig 6).

* regarding claim 43, further comprising a storage means for storing the results of acoustic analysis performed by the analyzer (col 18, lines 8-49, fig 6).

* regarding claim 44, wherein the storage means comprises rewritable data storage media (col 18, lines 8-49, fig 6).

* regarding claim 45, wherein the storage means comprises permanent data storage media (col 18, lines 8-49, fig 6).

* regarding claim 46, further comprising the results of acoustic analysis performed by the analyzer stored in the storage means (col 18, lines 8-49, fig 6).

* regarding claim 47, further comprising a temperature control means for controlling the temperature of the reservoirs (col 11, lines 53-61, col 12, lines 13-19).

* regarding claim 48, a method for acoustically assessing the contents of one or more reservoir (Abstract);

* (a) selecting a reservoir from a plurality of reservoirs each comprising a solid surface, wherein a portion of each reservoir is adapted to contain a fluid (col 4, lines 20-53, col 12, lines 20-65);

* (b) positioning an acoustic radiation generator in acoustic coupling relationship to the selected reservoir (col 4, lines 20-53, 59-65, col 12, lines 20-65);

* (c) actuating the acoustic radiation generator to generate acoustic radiation so that the generated acoustic radiation is then transmitted through the solid surface and through the portion of the selected reservoir adapted to contain a fluid to an analyzer

capable of analyzing a characteristic of the transmitted radiation, the characteristic corresponding to a property of the of the contents of the selected reservoir (col 4, lines 3-53, col 12, line 20-col 13, line 2, col 17, line 32- col 18, line7, figs 1-2, 6);

* (d) operating the analyzer to analyze the characteristic of the transmitted acoustic radiation (col 4, lines 44-53, col 17, lines 58-col 18, line 12, col 17, line 58-col 18, line 7, figs 1, 2, 6).

* regarding claim 49, further comprising repeating steps (b), (c), and (d) for the remaining reservoirs (abstract,

* regarding claim 55, further comprising, after step (a), step (a') dispensing a quantity of fluid from the reservoir/ejecting a droplet of fluid (col 4, lines20-39, figs 1-2).

* regarding claim 56, wherein step (a') is carried out before step (d) (col 17, line 58-col 18, line 7, fig 6).

* regarding claim 57, further comprising, during or after step (d), step (e) determining the quantity of fluid dispensed from the reservoir using the analyzed characteristic of step (d).

* regarding claim 58, wherein step (a') is carried out after step (d).

* regarding claim 59, wherein steps (a') and (d) are carried out simultaneously.

* regarding claim 60, wherein step (a) is carried out through acoustic ejection (Abstract, col 4, lines19-67, col 5, lines 1-9, line 60-col6, line15, figs 1-2).

* regarding claim 61, wherein step (a') is carried out after sufficient time has passed to allow for the contents of the reservoir to melt/change in viscosity (col 5, lines 27-37, col 9, lines 13-51, fig 6).

* regarding claim 62, wherein step (b) comprises positioning the acoustic radiation generator such that acoustic radiation generated by the acoustic generator is directed toward a free surface of a fluid within the reservoir (col 8,lines 5-31, figs 1-2)

* regarding claim 63, further comprising, after step (d), step (e) correlating the characteristic to the volume of the contents in the reservoir (col 5, lines27-38).

* regarding claim 64, further comprising, after step (d), step (e) correlating the characteristic to a property of the contents in the reservoir (col 17, line 58-col 18, line 7)

* regarding claim 65, wherein the property is viscosity (col 5, lines 27-37, col 9, lines 13-51, fig 6).

* regarding claim 66, wherein the property is surface tension (col 5, lines 27-37, col 9, lines 13-51, fig 6).

* regarding claim 67, wherein the property is acoustic impedance (col 11, line 62-col 12, line 12).

* regarding claim 68, wherein the property is solid content (col 15, lines 39-col 17, line 9).

* regarding claim 69, wherein the property is impurity content (col 15, lines 39-col 17, line 9).

* regarding claim 70, where step (d) comprises measuring the travel time of the acoustic radiation transmission through the reservoir (col 3, lines 3-30, col 4, lines 19-53, col 5, lines 27-38, col 7, lines 55-61, col 8, lines16-31, col 17, line 58-col 18, line 7, fig 6).

* regarding claim 71, wherein step (d) comprises determining the difference between the generated and transmitted acoustic radiation (col 3, lines 3-30, col 4, lines 19-53, col 5, lines 27-38, col 7, lines 55-61, col 8, lines16-31, col 17, line 58-col 18, line 7, fig 6).

* regarding claim 72, wherein step (d) comprises analyzing the difference in the intensity between the generated and transmitted acoustic radiatio. (col 3, lines 3-30, col 4, lines 19-53, col 5, lines 27-38, col 7, lines 55-61, col 8, lines16-31, col 17, line 58-col 18, line 7, fig 6).

* regarding claim 73, wherein step (d) comprises analyzing the difference in the intensity between the generated and transmitted acoustic radiation (col 3, lines 3-30, col 4, lines 19-53, col 5, lines 27-38, col 7, lines 55-61, col 8, lines16-31, col 17, line 58-col 18, line 7, fig 6).

* regarding claim 74, further comprising (e) storing the results of the acoustic analysis performed by the acoustic analyzer (col 18, lines 8-49, fig 6).

* regarding claim 75, further comprising, during any of steps (a), (b), (c), and (d), ensuring that the contents of the reservoirs are not exposed to optical radiation (col 6, line45-col 7, line8, figs 1-2)

* 76 wherein each of steps (a) (b), (c), and (d) are carried out while the reservoirs are in a sealed state (col 6, lines 45-60).

* regarding claim 77, a method for accurately dispensing fluid from a reservoir, (Abstract, figs 1-3);

* (a) positioning an acoustic radiation generator in acoustic coupling relationship to a reservoir selected from a plurality of reservoirs, wherein a portion of each reservoir is adapted to contain a fluid (col 4, lines 19-53, col 12, lines 35-45, figs 1-2);

* (b) transmitting acoustic radiation generated by the acoustic radiation generator through at least the portion of the selected reservoir adapted to contain a fluid (col 4, lines 3-53, col 12, line 20-col 13, line 2, figs 1-2);

* (c) analyzing a characteristic of the transmitted acoustic radiation (col 4, lines 44-53, col 17, lines 58-col 18, line 12, col 17, line 58-col 18, line 7, figs 1, 2, 6).

* (d) dispensing fluid from the selected reservoir according to the analysis of the characteristic of the transmitted acoustic radiation (col 4, lines 44-53, col 17, lines 58-col 18, line 12, col 17, line 58-col 18, line 7, figs 1, 2, 6).

* 78, wherein step (d) is carried out through acoustic ejection (col 4, lines 21-38, figs 1-2).

* 79, wherein steps (a), (b), (c), and (d) are repeated for another reservoir selected/selectively/ from the plurality of reservoirs (col 12, lines 20-66).

* regarding claim 80, in a device for dispensing one or more fluids from a plurality of reservoirs each having a portion adapted to contain a fluid (Abstract, figs 1, 2);

* an acoustic radiation generator for generating acoustic radiation (col 4, lines 1-30, figs 1-2);

* a means for positioning the acoustic radiation generator in acoustic coupling relationship to each reservoir such that acoustic radiation generated by the acoustic radiation generator is transmitted through at least the portion of each reservoir adapted to contain a fluid (col 12, lines 35-45, figs 1-2);

* an analyzer for analyzing a characteristic of acoustic radiation, wherein the analyzer is positioned to receive the transmitted acoustic radiation (col 4, lines 44-53, col 17, lines 58-col 18, line 12, col 17, line 58-col 18, line 7, figs 1, 2, 6).

* regarding claim 81, wherein the acoustic radiation generator represents a component of an acoustic ejector/emitter/ (col 4, lines 21-38, figs 1-2).

* regarding claim 82, wherein the acoustic radiation generator comprises a component common to the acoustic analyzer (col 17, line 58-col 18, line 7, fig 6).,

* regarding claim 83, wherein the component common to the acoustic radiation generator and the acoustic analyzer is a piezoelectric element (col 2, lines 52-67, col 3, lines 1-2, col 4, lines 5-15, col 8, lines 17-31, col 12, lines 26-53, col 17, lines 58-col 18, line 8, figs 1-3, 6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 12-17, 50-54 are rejected under 35 U.S.C. 103(a) as being obvious over Williams et al. (US 6,596,239 B2) in view of Lee (US 6,610,223 B2).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Williams et al. disclose the following:

* wherein at least one reservoir is constructed to contain small amounts of fluid (Abstract, col 1, lines 60-64).

Williams et al. do not disclose:

* regarding claim 15, wherein at least one reservoir is constructed to contain no more than about 1 mL of fluid.

* regarding claim 16 wherein at least one reservoir is constructed to contain no more than about 1μL of fluid.

* regarding claim 17 wherein at least one reservoir is constructed to contain no more than about 1 nL of fluid.

It would have been obvious to one having ordinary skill in the art at the time the inventio was made utilize at least one reservoir that is constructed to contaim no more than about 1ml or 1μL or nL of fluid, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize at least one reservoir that is constructed to contain no more than about 1 mL of fluid, at least one reservoir that is constructed to contain no more than about 1μL of fluid, or at least one reservoir is constructed to contain no more than about 1 nL of fluid, taught by Lee into Williams et al. for the purpose of utilizing multiple reservoirs systems.

Furthermore, Williams et al. do not disclose the following claimed limitations:

* regarding claim 12, wherein the device comprises 10,000 reservoirs.

* regarding claim 13, wherein the device comprises 100,000 reservoirs.

* regarding claim 14, wherein the device comprises more than 500,000 reservoirs.

* regarding claim 50, wherein the contents of the reservoirs are analyzed at a rate of at least about 96 reservoirs per minute.

* regarding claim 51, wherein the contents of the reservoirs are analyzed at a rate of at least about 384 reservoirs per minute.

* regarding claim 52, wherein the contents of the reservoirs are analyzed at a rate of at least about 1536 reservoirs per minute.

* regarding claim 53, wherein the contents of the reservoirs are analyzed at a rate of at least about 3456 reservoirs per minute.

* regarding claim 54, wherein the contents of the reservoirs are analyzed at a rate of at least 10,000 reservoirs per minute.

Lee further discloses the following claimed limitations:

* regarding claim 12, wherein the device comprises 10,000 reservoirs (col 15, lines 38-43, col 22, lines 20-26) for the purpose of utilizing multiple reservoir systems.

* regarding claim 13, wherein the device comprises 100,000 reservoirs (col 15, lines 38-43, col 22, lines 20-26). for the purpose of utilizing multiple reservoir systems.

* regarding claim 14, wherein the device comprises more than 500,000 reservoirs (col 15, lines 38-43, col 22, lines 20-26) for the purpose of utilizing multiple reservoir systems.

* regarding claim 50, wherein the contents of the reservoirs are analyzed at a rate of at least about 96 reservoirs per minute (col 16, lines 60-67) for the purpose of allowing fast and controlled ejection of different fluids.

* regarding claim 51, wherein the contents of the reservoirs are analyzed at a rate of at least about 384 reservoirs per minute (col 16, lines 60-67) for the purpose of allowing fast and controlled ejection of different fluids.

* regarding claim 52, wherein the contents of the reservoirs are analyzed at a rate of at least about 1536 reservoirs per minute (col 16, lines 60-67) for the purpose of allowing fast and controlled ejection of different fluids.

* regarding claim 53, wherein the contents of the reservoirs are analyzed at a rate of at least about 3456 reservoirs per minute (col 16, lines 60-67) for the purpose of allowing fast and controlled ejection of different fluids.

* regarding claim 54, wherein the contents of the reservoirs are analyzed at a rate of at least 10,000 reservoirs per minute (col 16, lines 60-67) for the purpose of allowing fast and controlled ejection of different fluids.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a device that comprises 10,000 reservoirs, a device that comprises 100,000 reservoirs, a device that comprises more than 500,000

reservoirs, wherein the contents of the reservoirs are analyzed at a rate of at least about 96 reservoirs per minute, wherein the contents of the reservoirs are analyzed at a rate of at least about 384 reservoirs per minute, wherein the contents of the reservoirs are analyzed at a rate of at least about 1536 reservoirs per minute, wherein the contents of the reservoirs are analyzed at a rate of at least about 3456 reservoirs per minute, wherein the contents of the reservoirs are analyzed at a rate of at least 10,000 reservoirs per minute, taught by Lee into Williams et al. for the purposes utilizing multiple reservoir systems and for the purpose of allowing fast and controlled ejection of different fluids.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 703-306-4548. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, B. Fuller can be reached on 703-308-0079. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

K. Feggins
November 12, 2003